

AN  
HISTORICAL DISCOURSE  
OF  
*The FIRST INVENTION*  
OF  
NAVIGATION.

AND  
*The Additional Improvements of it.*  
WITH  
The probable Causes of the *Variation*  
of the COMPASSE:  
And the *Variation* of the *Variation*.

LIKEWISE,  
Some Reflections upon the Name and Office  
OF  
ADMIRALL.

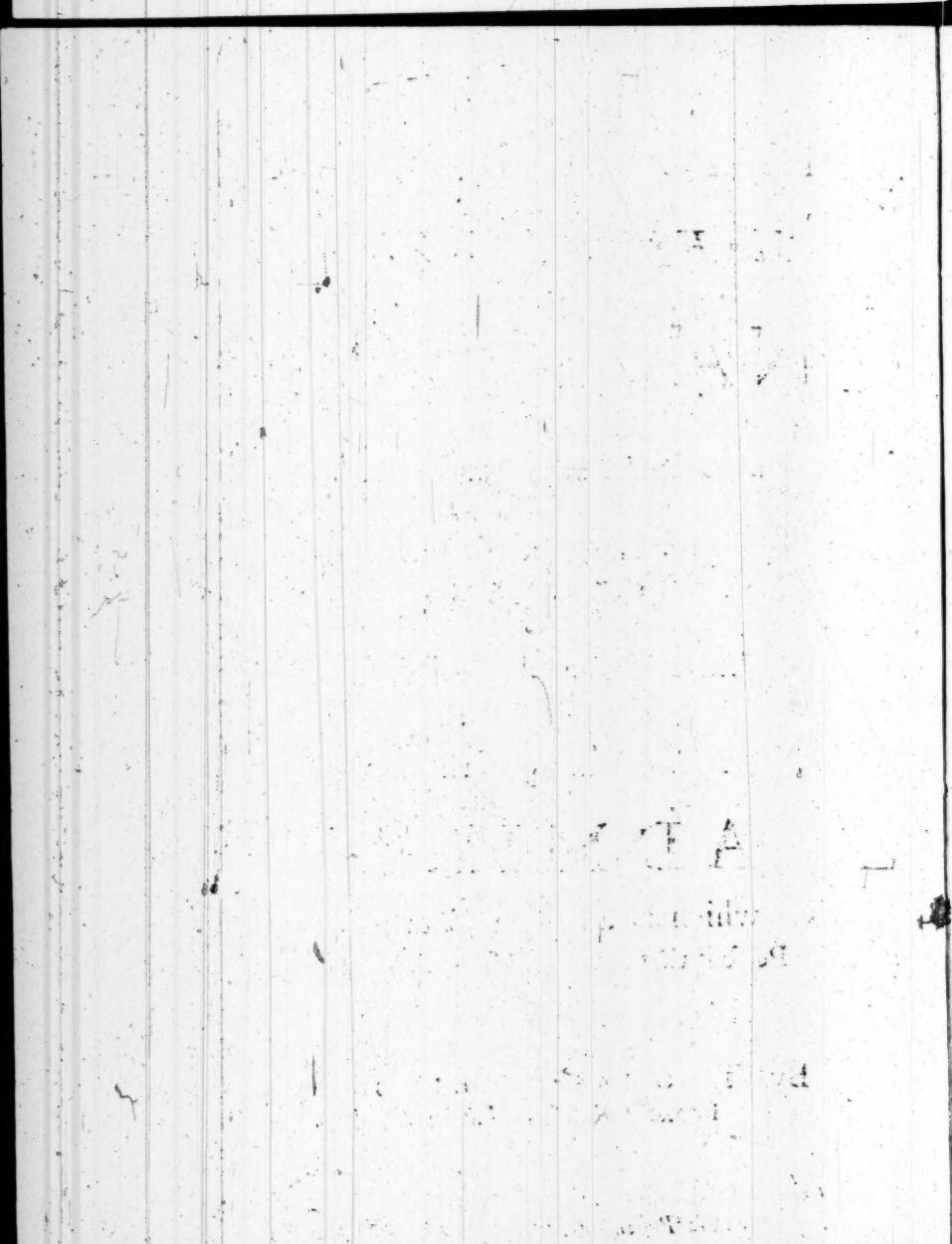
To which is added a Catalogue of those  
Persons that have been from the first Institution  
Dignified with that Office.

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To his Noblest Friend

*S<sup>r</sup> FRANCIS PRUJEAN*

Doctor of *PHYSICK*.

*S I R,*



He Censures and Suffrages of the world, are like Rocks and Shelves, against which, Books like Vessels, oftentimes dashing, find their own Fate and Shipwrack : Sir , your Acceptance will dispense a nobler, and more auspicious Gale, then any which can be breath'd from the looser or vainer Aire of popular Applause, to transport this discourse to the publique ; And it will be the happiness of this Treatise,

that in future **T**imes it shall entitle its safety to so successful a Steerage. For indeed the **T**empest with Reason, is frequently more destructive and ruinous, then the Storm without it, my own Fear and Caution can secure or rescue me from the danger of the last; but onely your Candor and Approbation can redeem from the prejudices of the first,

*S I R,*

Your most

devoted Servant,

*Thomas Philipott.*

The





# The First INVENTION, AND ADDITIONAL IMPROVEMENTS OF NAVIGATION.

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*There having been much written concerning this Subject, which lies dispers'd in the pages of several Authors, and finding that none have as yet attempted to compile and amass those scattered Notions into one heap, I did believe it a task not unworthy the expence of Time, or my Labour, to contract those divided Discourses into some few sheets: And having brought them into shape and order, to offer them up to Publick View; which is the subject matter of this ensuing Treatise.*



But, it is indisputably true from the Authority of the Sacred Records, the structure of the Arke ow'd, and entituled its original contexture to the industrious precaution of *Noah*, who by the immediate designation of God himself, brought that wooden Island into shape and order, to rescue some part of Mankind, from the angry Baptisme of a publique Deluge.

And it is probable, that the posterity of *Noah*, having plantations which were contiguous to Mount *Ararat*, where the Arke rested; and there viewing its skeleton, might according to that original, form and build such

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Ships and others Vessels, (the Art of Navigation being not yet arriv'd to its Solstice) as might make Rivers and more spacious waters obvious to a passage, and maintain such a necessary intercourse, as might improve a commerce between Nation and Nation.

The Heathen Records, and Monuments of Pagan Antiquitie, which were ignorant of the structure of the Arke, according to the variety of Tradition, assign the Invention of Navigation to several persons. *Diodorus Siculus* attributes it to *Neptune*, who from thence contracted the Appellation of God of the Sea. *Strabo*, to *Minos* King of *Crete*. And lastly, *Tibullus* consecrates it to the Fame and Memory of the City of *Tyre*.

*Thucid.* p. 4,  
5, 6.

*Minos* indeed expelled Malefactors out of the Islands, and in most of them planted Colonies of his own, by which means, they who inhabited the Sea-coasts, becoming more addicted to riches, grew more constant to their dwellings; of whom, some grown now rich, circumscrib'd and incompass'd their Cities with Walls, and others by the influence of *Minos* built a Navy, and by an active and noble diligence so secur'd commerce, that they render'd Navigation free.

But it is most probable, that *Tyre* being in elder times, a City as eminent for its Wealth and Traffick, as it was for its strength, and magnificence, and enjoying with its bordering neighbours the *Phenicians*, a large extensive Sea coast, and many capacious Havens, which had an aspect on the *Mediterranean-sea*, found out at first the institution of Shipping. From the *Phenicians* and *Tyrians*, it was conducted down to the *Egyptians*, by whose industry and ingenuity much was annexed to the advantage and perfection of it: For whereas the first Vessels were fram'd out of the trunke of some large Tree, made hollow by Art, or else of divers Boards, compacted into the fashion of a Boat, and cover'd with the skins of Beasts, the *Phenicians* moulded them into a more elegant and convenient form, and secur'd them with greater additions of strength, whilst the *Egyptians* added

added to the former structure the supplement of Decks. From the *Egyptians* this Art was transported to the *Gracians*; for when *Danaus* King of *Egypt*, to decline the fury of his Brother *Rameses*, made his approaches to *Grece*, he first instructed its Inhabitants to sail in cover'd Vessels, call'd *Naves*, who before perfected their Voyages over those narrow Seas, on Beams and Rafter's fast'ned together, to whom they gave the Appellation of *Rates*. Amongst the *Gracians*, those of *Crete* had the highest repute for the manage of Navigation, which causeth *Strabo* to ascribe the Invention of Ships to *Minos*. In times subsequent to these, the *Carthaginians* extracted from *Tyre*, grew most considerable in Shipping, by the supply of which, they often disorder'd and distressed the affairs of the *Romans*: But the fury of a Tempest having separated a *Quinqueremis*, or Gally of five Banks of Oares, from the residue of the *Carthaginian* Navy, cast it on the Coast of *Italy*; by a curious inspection into which, the *Romans* obtain'd the Art of Shipping, and not long after, atchiev'd the Dominion of the Sea. That the *Phanicians* and *Greeks*, transmitted the knowledge of Navigation to *Spain* and *France*, is without controverſie, since *Gades* in the first was a Colony of the *Phanicians*, and *Marsilles* in the last a plantation of the *Phœceans*. As for *Belgium* and *Britain*, they were in Ages of an elder inscription very barren and indigent in Shipping; for *Cesar*, when he made his eruption on the last, found the *Circumambient Seas* so ill furnish'd, that he was forc'd with the industrious assistance of his soldiery to build and equip a Navy of six hundred and two and thirty Vessels to transport his Army into *Albion*.

The *Phanicians* having, as is above recited, invented open Vessels, and the *Egyptians* Ships with Decks, the last of these inforc'd the Art of Navigation, by adding to it the invention of Gallies, with two Banks of Oares upon a side; which sort of Vessels in procedure of time, did swell into that voluminous bulk, that *Ptolemy Philo-*

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*pater* is said to have fram'd a Gally of 50. Banks. Ships of burden styl'd *Cirera*, entitle their invention to the *Cypriots* Cock boats or Skiffs, (*Scaphæ*) owe their first structure to the *Illirians* or *Liburnians*, *Brigantines* (*Celoces*) confess theirs to have been the artifice of the *Rhodians*; *Frigots* or light Barks (*Lembi*) acknowledge their original unto the indultry of the *Cyrenians*; the *Phaselus* and *Pamphyli*, ships instructed for war, were the invention of the *Pamphilians*, and the inhabitants of *Phaselis* a Town of *Lycia* in *Asia minor*. Vessels for transporting of Horse styl'd *Hippagines*, are indebted for their first institution to the *Salaminians*. Grapling-hooks, for theirs to *Anacharsis*. Anchors, confess their first knowledge to have been from the *Tuscans*. The Rudder-helme, and Art of Steering, is ascrib'd to *Typhis*, principal Pilot in *Jason's* eminent Ship, call'd the *Argoe*, who having observed that a Kite when she divided the Aire, steer'd her whole body and flight with her tail, perfected that in the designs of Art, which he had discover'd to have been effected by instinct in the works of Nature. If we please to trace out the first Inventors of Tackle, we shall discover that the primitive institution of the Oare is attributed to the *Bæotians*, and the original discovery and use of Masts and Sails ennoble the memory of *Dædalus*, and his Son *Icarus*; the last of which confiding too much in the dexterity of this invention, giving too large and spreading a Sail to the Bark he was engaged in, over-set the Vessel, and perish'd, and adopted the Sea, in which he miscarried, into his own Name.

But though the supplement and addition of Decks of Ships, intitles it self to the original Artifice of the *Egyptians*, as is before recited; yet had they other of a more narrow dimension, both for use and transportation; for the *Egyptians* anciently, (says *Pliny*, *Lib. 13. Nat. Hist.*) us'd to make Boats of Reeds and Bulrushes; which assertion he again justifies in another place, *Pap' r accis navibus* (says he) *armamentisque Nili navigamus*; and

pater

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and to these Vessels *Lucan* alludes, *Lib. 4. Pharf.*

——— *Sic cum tenet omnia Nilus,  
Conferitur bibula memphitica Cymba Papyro.*

Which fashion of Boat *Moses* was engag'd in, when *Pharaoh's* Daughter rescued him from the danger of the river. The Prophet *Esay* records such utensils in that periphrasis of *Egypt*, *Wo to the land shadowing with wings, that sends Ambassadors by Sea in Bulrushes.* *Strabo* sail'd to *Egypt* in a small Vessel made of Wicker, as his own relation discovers to us in the 17. of his *Geography.* *Juvenal* also makes mention of earthen Boats in *Egypt* us'd and employ'd also there to sail with, for recording the deadly feud and superstitious conflicts, commenc'd between *Ombos* and *Tentyra*, in relation to their gods, he speaks thus, *Stat. 15.*

*Hæc scivit Rabie imbellæ, & inutile vulgus  
Parvula fittilibus solitum dare vela phaselis,  
Et brevibus picta remis incumbere testa.*

The *Britains* had anciently their *Naves vitiles* in *Pliny's* style, the Natives of *Ireland* call them, *Corraghs*, and some *Corracles*, they were little Vessels cover'd with Leather, in their dimension scarce exceeding the bulk of a Basket; and these kind of Boats or Baskets were used by *Julius Caesar* to transport his Army over the river *Sicoris* against *Petereius*, and other rivers elsewhere; and he had learn'd the making of them it seems from the *Britains*, when he was in this Island, as himself attests in his first Book *De Bello Civili.* *Cujus generis* (says he) *cum superioribus usus Britannia docuerat*: and in a subsequent discourse he describes them thus; *Carina primæ ac statamina ex levi materiâ fiebantur, reliquum corpus Navium viminibus contextum integebatur.* They have the like Vessels on the river *Euphrates*, to transport Commodities to *Babylon*, and their proportion so conforma-

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ble to these British ones, (according to the pattern discover'd to us by *Herodotus*) that a man would judge, that either the *Britains* extracted the description of these Vessels from the *Babylonians*, or the *Babylonians* from them. For *Herodotus* in *Clio*, that is, the first Book of his History, affirms, that they had Boats made of Osier or Willows, of an orbicular form, and in the fashion of a Buckler, without Prow or Poop, and cover'd over on the outside with the Hide of a Bullock tann'd. In these, besides their Native Commodities, they us'd to convey Palm-wines in Tons, to be sold or vend'd at *Babylon*, two men with an Oar a piece in their Hands conducting and managing the Vessel.

These Vessels were so portable, that the Owners were accusom'd to transport them on their Backs to and from the Water; the Master would carry his Boat by Land, and the Boat would waft the Master on the Water: As the *Arabian* Fisherman uses to do with his Tortoise-shell, which is his Shallop by Sea, and his House on the Land, under which he sleeps, and in which he sails.

Proportionate in their Dimension to these, are those which the *Egyptians* use at this day upon the *Nile*, which they take upon their Backs, when they approach the Cataracts and steeper falls of that river.

*Boterus* calls them *Naves plicatiles*, and which they employ in some places of the *West Indies*. For in the year 1509. we read that there were brought to *Roan* Seven Indians confin'd to one small Vessel or Boat, which was so portable that one man could raise it up with his Hand; as the same *Boterus* in his Relations seems to intimate.

In some places of the *West-Indies* they Fish with Fagots compos'd of Bulrushes, in their Dialect styl'd *Balsas*, having sustain'd them upon their Shoulders to the Sea, they there cast them in, then leap upon them, and after Rowe into the Main with small Reeds on either side, themselves standing upright like *Fritons* or *Nep-tunes*;



tunes ; and on these *Balsa's* they are accustom'd to carry those Cords and Nets they employ in Fishing. The *Indians* likewise have long Boats call'd *Canoe's*, made hollow, and artificially fram'd out of one Tree. In *Greenland* the Fisher mens Boats are compos'd into the Shape of *Weavers* Shuttles, cover'd outwardly with Skins of Seals, and inwardly fashio'd and fortified with the Bones of the same Fishes ; which being sewed together with many doubles and Sutures, are so secure, that in foul and stormy Weather, they will shut themselves up in the same, being rescued by the Aid of these, from the Fury and imminent prejudices of Rocks, Winds, and Tempests ; These are about Twenty Foot in length, and two Foot and an half in their Breadth, and so swift that no Ship is able to outvie them in speed ; and so light of Portage, that one Man may support many ; and they are furnish'd but with one *Oare*.

Before I wind up this Discourse I shall winnowe and discusse that Question, whether or not Antiquity had any discovery or Notice of the Compasse which in this Latter Age hath contributed so much to the Improvement of *Navigation*, those who do assert that it had some imperfect Glimmering, or rather some gloomy Cognisance of it, do establish their opinion on the Authority of *Plautus*, where they find mention of the *Versoria* ; and secondly, because the Loadstone, which sways and manages the compass, was anciently by the *Greeks* styl'd, *Magnes*, and *Lapis Heracline*, both which Names remain imitated upon it until this day. But to the first it is answered, that the *Versoria* of *Plautus*, is no other, then that piece of Tackle, which in the Modern Dialect of our Mariners, falls under the appellation of a *Bolin*, by which they us'd to turn their Sails, and proportion them to the changeable vicissitude of every wind. And so much is manifest from *Plautus* himself, in the Comedy which he styles *Mercator*, saying, *Hinc ventus nunc secundus est, cape modo versoriam*. So call'd from *verso* to turn often, or else it may borrow its extraction

tion and Nativity from *versum*, the first supine of *ver-*  
*to*; whence *velum vertere*, is a customary term amongst  
the *Latines*, us'd to express the shifting of the Sail as the  
wind does vary. As for the Loadstone, it was indeed by  
the *Greeks* call'd *Lapis Heraclius*, not because *Hercules*  
*Tyrinus*, to whom the seafaring *Phenicians* in Storms and  
Tempests offer'd up their *Orizons* for protection, first  
trac'd out the vertue and energetical effluviūms of it, as  
some contend, but because it was discover'd near *Hera-*  
*clea* a City of *Lydia*, call'd for the same reason, and  
upon the same account *Lapis Lydius* alio; and by the  
Ancients known onely under the notion of a Touch-  
stone: Nor does the Name of *Magnes*, us'd under that  
Appellation promiscuously both by the *Greeks* and *La-*  
*tines*, owe its Original Etymologie to any other Root or  
Cradle, then that it was found near *Magnesia* a City of  
*Lydia*, of which *Heraclea* above mention'd, was like-  
wise a part from whence it hath ever since purchas'd the  
constant Denomination of *Lapis Magnes*; so *Suidas* as-  
serts for the *Greeks*, and old *Lucretius* affirms the same  
for the *Latines*. Having evinc'd from these demon-  
strations the ignorance of Antiquity, both in the notional  
knowledge and practical application of the Compass; It  
now remains my Task to unwind to whom in times of  
a more recent inscription, this excellent Instrument en-  
tituled its first discovery. And if we will traverse and  
peruse records of a Modern aspect, we shall find that  
the invention of the *Pixis Navica* or Compass, is ge-  
nerally ascrib'd to *John Goia*, or *Flavio Goia*, as others  
style him, of *Amalphi* in *Campania* in the Kingdome of  
*Naples*; But all rare and curious Artifices are in their  
first productions like the designs of Chymistry, much in  
projection, but little in perfection; for his discovery  
reach'd but to eight Winds onely, which made up his  
Compass, that is, the four principal, and four collateral,  
and left the improvement of this invention to be at-  
tempted by posterity, which indeed did adde shape and  
just perfection to this ingenuous design: For in some few



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Ages subsequent to this, the people of *Antwerp* and *Bruges* completed this invention, by annexing to the Compass 24. other subordinate Winds or Points. Before this invention, Pilots were directed in their right Voyages, by certain Stars they took notice of, especially the *Pleiades* or *Charles his Wain* and the two Stars in the Tail of the Beare, call'd *Helice* and *Cynosura*, which are therefore call'd Load-stars, or Leading Stars; as Travellers in the Deserts of *Arabia*, and those of *Tartary* were always guided by some fixed Stars in the Night Time, to Steer their courses in those pathless, disorder'd, and inhospitable ways; so Seamen were directed by the like heavenly guides, in the untractable wilderness of waters, before this excellent Artifice was found out: But if the Skie happen'd to be sullied with Mists, and the Stars to be muffled with Clouds, then the most experienced Pilot was at a loss, and was oblig'd by dropping an Anchor, presently to take up his rest.

But the ingenious *Amalphitan*, hath secured posterity by a noble remedy, against this grand inconvenience, and discover'd a method, by which men might Steer a certain and infallible course, in the most gloomy Nights, and most tumultuous Seas, and this by the guide and conduct of a little stone, stil'd from its use and influence, the Load-stone. This Load-stone, is now our Load-star, and the Mariners directory.

This Stone treasures up two strange properties in its dusky entrails, the one of Attraction, the other of Direction; this property of Direction (which chiefly hath an aspect on our present business) is, that being set in a Dish, and left to float freely upon the Water, it will with one end point directly to the North, and with the other to the South, and will dispense this faculty or property, to a Needle that is rubb'd or touch'd with it.

The *Pixis Nautica*, or Mariners Card, which carries a Needle touch'd with the Load-stone in the middle of it, with two and thirty Rumbs or Lines drawn round about it, according to the Number of the Cardinal and

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Collateral Winds, is no less useful by Land, then it is by Sea, so that they who are engaged to travail through Deserts, as the *Caravans* do to *Mecha* and *Medina*, and other places do now make good use of this Artifice, whereas in former Ages, a Star was their best Pilot by Night.

*Lud. Barterna* relates, that they who travail over the *Syrian* and *Arabian* Deserts, which are fac'd and cover'd with a filme of light and shifting sand, so that no track can ever be discover'd, do frame certain Boxes of wood, which they place on Camels backs, and shutting themselves up in the said Boxes, to rescue themselves from the Sand, by the help of the Load-stone, like the Mariners Compass, they Steer their course over the vast, uncouth, and untractable Deserts. Some do entitle the Invention of the Compass, to the people of *China*. Doctor *Gilbert* in his Book *de Magnete*, asserts that *Pau'us Venetus* transported it first into *Italy*, in the year 1260. having learn'd it from the *Chinese*, and *Lud. Verromannus* affirms, that when he was in the *East-Indies*, about the years 1500. (above an Hundred and Sixty years since) he saw the Pilot of his Ship direct his course by a Compass, fashion'd and fram'd according to the Figure and proportion of those we use at this instant, when he was sailing towards *Java*. If you will consult *Pliny*, he will tell you, that the Inhabitants of *Taprobana*, (now call'd *Sumatra*) because they could not behold the Pole-star to sail by, carried with them certain Birds to Sea, which they did often let flie; and as these Birds by natural instinct applied their flight always to the Land, so the Mariners directed their course after them. The Mariners Compass is not arriv'd yet to that perfection, but that it requires some improvement and amendment; for the Magnetique Needle does not exactly point to the North in all Meridians, but varies and distorts it self (in some places more, in some less) from the direct posture, configuration, and aspect of the North and South, which multiplies and inforces the Sea-mans distractions, and  
enwraps

enwraps him oftentimes in difficult and dangerous errors. *Van Helmont*, an eminent Paracelsian of *Flanders*, professes an expedite way to regulate this grand inconvenience, namely, how to make a Needle that should never vary or alter from the right point, which may be perform'd by a vigorous imagination, as he affirms thus; If a man in framing the Needle, shall stand with his Back plac'd to the North, and place one point of the Needle (which he intends for the North) directly towards himself, the Needle so made, shall always point regularly and infallibly toward the North without variation. I wish that some person of an exalted imagination, would compose some Needles for experiment after *Helmont's* direction, since it is an affair of noble and active concernment, to the publique interest of every Nation, to have this invention of the Compass, either improv'd or rectified.

But this Artifice of *Helmont* is infirme and crazy in the whole frame and contexture of it, if the variation of the Needle, from its Meridional Polarity, proceed from the attractive vigour and magnetical alliciency of the Earth, which by irrefragable demonstrations may be evinc'd to be one continued Magnet. Now a magnetical body is stil'd, not onely that which hath a power attractive, but that which being situated in a convenient medium, by an intrinsique natural propension, disposes it self to one invariable and fixed residence, so that if it were violently removed, yet would it not abandon its primitive points, nor fix in the East and West, but return unto its polary situation again. And such a magnetical virtue is diffus'd through the whole Body of the Earth, whereby as unto its natural Points, and proper Terms, it still makes its addresses unto the Poles, being so constituted in its whole frame, order and aspect, unto these Points, that those parts which are now at the Poles, would not naturally reside under the Equator, nor *Nova Zemla* continue in the place of *Java* or *Borneo*. Nor is the attractive vigour of this great Body the Earth,

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cloister'd up within its own inward cells and recesses, or circumscrib'd within the circumference of its own surface, but shed at indeterminate distances, through the Aire, Water, and all other circumjacent Bodies; exciting and transplanting its magnetical virtue into all bodies, either within its surface, or without it; and effecting that in an abstruse and indiscernable way, what we visibly behold perform'd by the Loadstone. For these effluviiums penetrate all Bodies, and being ever ready in the medium, attaque all objects proportionate, or capable of their vigorous and active excitation: And this is manifest from steel wires thrust thorough little Spheres, or Globes of Cork floating on the Water, or in naked Needles gently drop'd thereon; for so dispos'd they will not rest, untill they have trac'd out the Meridian, and as neer as possibly they may, lye parallel to the Axis of the Earth. Now this Direction does not originally result from themselves, but is derivative and contracted from the magnetical efflux of the Earth. And these demonstrations may be improv'd by the observation of some subsequent experiments; as first, from a Needled Sphere of Cork, equally contiguous unto the surface of the Water; for if the Needle be not seated in an exact equilibration, that end which is too light, if touched, becomes even; that Needle also, which will but just swim under Water, if forcibly touched, will sink deeper, and sometimes unto the bottome, which proceeds from an union of those magnetical effluxions which estreat from the Earth, with those magnetique Atomes which flow from the Body of the Loadstone, and make an impression on the Needle.

Now those, first being of a congenerous nature with the last, but more numerous and powerful, by this their mutual entwining and complication, drag away the Needle as their Captive, and sink it into the above recited position.

Secondly, from a Wire or Needle which being denuded and devested of that meridianall projection the magne-

magnetique impression of the Loadstone had formerly entatated and imprinted upon it, by its great adversary the Fire, by being sometime enter'd in the Earth, becomes new impregnated with the virtue of that great and vigorous Magnet, and again contracts such a polarity, or meridional situation, as though it had never suffer'd under the persecution of its flaming enemy. Now whether these above mention'd effluviūms of the Earth, do fly by eſtreated Atoms, or winding particles, as some assert, or glide by streams attracted from either Pole or Hemisphere of the Earth, unto the Equator, as others affirme; it signifies nothing to the Diminution of the Magnetique virtue of the Earth, but rather more distinctly sets down the gests and progressive motion of its attractive alliciency, and excitation.

Thirdly, if a Loadstone be made red hot, it loseth the Magnetical Vigour it had before in it self, and acquires another from the Earth in its Refrigeration; for that part which cooleth towards the Earth, will obtain the Respect of the North, and attract the Southern point or *Cuspis* of the Needle: And the reason hereof is, that though the attractive virtue of the Loadstone, be in this fiery Agony much empair'd, exhausted and diminish'd, yet is it not totally extinguished, so that when its sickly and impoverish'd vigour is re-inforc'd and recruited, by a supply or accession of Effluviūms from the Earth, by an union or combination with this newstock of Magnetical Atoms, it does not onely revive, but is improv'd to its former Attraction and Verticity.

Fourthly, it is observ'd, that both Bricks and Irons, contract a verticity, by long and continued position; that is, not onely being plac'd from North and South, and lying in the Meridian, but respecting the Zenith and Perpendicular, unto the Center of the Earth; as is evident in Bars of Windows, Casements, Hinges, and the like. The same condition also do Bricks contract, by being long time plac'd in one continued situation in a Wall; for if the Needle be presented unto their lower

extreams, it wheeleth about, and turns its Southern point unto them. And the Reason of this is, that that Film or Scurf, in which they lay originally wrap'd up, and which did obstruct the Magnetical Impressions of the Earth, being worn off by Decursion of Time, and the perpetual Assaults of the Elements, the Magnetical Atoms of the Earth do with more vigour invade them, and by frequent onsets having implanted their virtue in them, engage them to that verticity.

Fifthly, Iron in a particular sympathy moves to the Loadstone, but yet, if it exceed a certain quantity, it abandons and quits those affections and interests; and like an affectionate Citizen, or faithful Patriot, moves to the Earth, which is the Region and Country of its Connaturals.

From what hath thus been remarkably discovered, it is easy to unfold, from a foundation not onely of probability, but almost of necessity, whence proceeds the cause of the variation of the Compass, that is, an Arch of the Horizon, intercepted between the true and Magnetical Meridian. The true Meridian is a greater Circle, passing through the Poles of the World, and the Zenith or Vertex of any place, exactly dividing the East from the West. Now on this Line, the Needle exactly lyeth not, but diverts and varies its point, that is, the North point on this side the Equator, the South on the other, sometimes unto the East, sometimes unto the West, and in some places varies not at all. Now the cause of this variation, may be the inequality of the Earth, variously dispos'd, and differently mixed with the Sea; with all the different emission of its strength and Magnetical vigor, from the more eminent and Gibbous or Knobby parts thereof; for the Needle naturally endeavours to conform unto the Meridian, but being distracted, is driven and distorted that way, where the greater and more powerful parts of the Earth are situated.

Now whereas on this side the Meridian, or the Isles of *Azores*, where the first Meridian is placed, the Needle varies



varies Eastward, it may be occasion'd by that vast Track of Earth, that is, of *Europe*, *Asia*, and *Africa*, seated towards the East, and disposing the Needle that way; on the other side, some parts of the *Azores*, or Islands of Saint *Michael*, which have a middle situation between these Continents, and that vast Tract of *America*, almost proportionate and answerable to these in its spacious Bulk and Dimension, it seems equally distracted by both, and diverting unto neither, doth parallel and place itself upon the true Meridian. But sailing farther, it veers its Lilly towards the West, and regards that Quarter wherein the Land is nearer or greater; and in the same Latitude, as it approaches its Shore, augments its variation. Now because where the greater Continents are United and Combin'd, the action and efflux of Magneticall Atoms is also greater, therefore those Needles do suffer the greatest variation, which are in Countries which do most feel that Magnetique Impression. And therefore hath *Rome* far less variation then *London*. For on the West-side of *Rome*, are seated the great Continents of *France*, *Spain*, and *Germany*, which seem to retrench the exuberant effluviu'm's, and poise the vigour of the Eastern parts. But unto *England* there is almost no Earth West, for the whole extent of *Asia* and *Europe* lyeth Eastward, and therefore at *London* it varies eleven Degrees, that is, almost one *Rhomb*. Thus also by reason of the great Continent of *Brasile*, *Pern*, and *Chili*, the Needle declines towards the Land twelve Degrees: But at the *Straights of Magellan*, where the Land is contracted into a narrow Volume, and the Sea on the other side of a vast diffusion and extent, it varies but five or six. And so likewise because the *Cape de las Agullas* hath Sea on both sides near it, and other Land remote, and as it were of an equal distance from it, therefore at that point the Needle conforms unto the true Meridian, being not distracted with the attraction resulting from the Vicinity of an adjacent Continent. To this may be added, that this variation proceedeth not onely from some

some eminent terrestrial knobs or excrescencies, which appear like so many wens upon the Face of the World; as also many Magnetical Veins of the Earth, collaterally respecting the Needle, but the different Accumulation of the Earth, disposed unto the Poles, lying under the Sea and Waters; which affect the Needle with greater or lesser variation, according to the vigour or impotency of these subterraneous Lines, or the intire or broken Body of the Magnetical Fabrick under it. As it is observable, from several Loadstones, plac'd at the bottome of any Water; for a Loadstone or Needle, upon the surface, will variously conform it self, according to the vigour or imbecillity of the Loadstones under it.

Lastly, from what hath been premis'd, a Reason may be alledged for the Variation of the Variation, and why according to observation, the variation of the Needle hath after some years been found to vary, either more, where it was discover'd to vary but little before, or but little, where formerly it had a greater deflection or variation. For this may proceed from the Mutation of the Earth, as it is dislocated or supplanted by Earthquakes, watted and empair'd by sulphurous, or other subterraneous fires; or else, as its Magnetique virtue is arrested in its emanation, by being astonish'd and stupefied by Mineral Spirits, or those Fumes and Exhalations that have any Mercurial or Arsenical Atoms implanted in them; all which by a reiterated impression may so alter the constitution of the Magnetical parts of the Earth, either by Substraction or Addition, that in decursion of time, they may vary the Variation over the place.

Having thus discover'd those, to whom not onely Ships, but likewise the Art of managing them did entitle its original invention, I shall adde something by way of supplement, touching the derivation of the Name of that eminent Officer, to whom both in elder and more modern Times, the care of publick Navies hath been committed, vulgarly stil'd the Admiral; and if we shall disjoynt or dissect the Name, we shall find it confels it self



self to be both of *Arabian* and *Greek* Extraction, for *Emir* or *Amir* in *Arabian* imports as much as Lord, and *αλος* in *Greek* is of the Sea; so that both these words being cimented together into the Appellation of *Admiral*, signifie a Lord of the Sea. Now the word *Emir* or *Amir*, for they are co-incident, was a denomination anciently us'd by the *Arabian Caliphs*, as a terme of dignity and eminence, so many of them had the additional appellation of *Amir Elmumunin*, and *Emir Ominnelin*; the first may be render'd *Rex Orthodoxorum*, or the King of Persons Orthodox; and the last may be translated *Rex Credentium*, Prince or King of Believers; and at this day, he that in *Turkie*, by the Command and Designation of the *Grand Signior*, delivers the Banners to the *Sanzacks* and *Beglerbegs*, by which they receive their Investiture, is stil'd *Emir Halem*, Lord of the Banner; or if you will receive it in a more pompous Epithite, the *Turks* chief Standard-Bearer; and this accords with what *Leunclavius* delivers in his *Turkish Pandects*. *Emir Halem* (says he) significat *Dominum Vexillorum & Flammeolorum*, qui scilicet suprenus est sultani Vexillifer, ac omnium Beglerbegis ac Sanzacebegis, quum creantur vexilla sua porrigit. And hence we read in the History of the *Holy War*, that *Robert Duke of Normandy* slew an eminent Saracenicall *Amir*, whose Standard had in summitate *Argentea Hasta Pomum Aureum*, which he offer'd at the Sepulchre of our Saviour, having purchas'd it at 20. Marks, of one who had taken it by Right of War. Now this word *Amir* or *Emir*, is deduc'd from the *Arabick*, Verbe *Amara*, which render'd into *Latine*, is *Dixit* or *Edixit*, or else extracted from the *Hebrew* Verbe, *Amar*, which melted into *Latine*, signifies *præcepit seu imperavit*, and it is possible the *Spanish* word *Almirante*, is contracted from *El Amirante*; and that again, by *Moorish* and *Arabick* Chane's from *Alamir*, which imports as much as the Chief Captain. Now although vulgar use and custome, by apposition of this word *αλος*, have restrain'd this great Officer

only to the Command of the Sea, yet in Times of an elder aspect, it was of a more confused, or promiscuous signification; and was not alone confin'd to Maritime Authority, but was likewise attributed to those eminent *Saracenicall* Souldiers and Governours, who were engag'd in a Command by Land, which was proportionate, and answerable in its Latitude and Extent, to that which was exercis'd by the ancient Tribunes of the *Roman* Militia; and this I can easily collect from the Authority and Testimony of very ancient Authors. And first, *Sigebert* the Monk, in his Chronicle relates, that *Mahomet* or *Muhammad*, so he calls him, about the year 630. constituted four Governours in the *Saracenicall* Kingdome, which were call'd Admirals. And *Theophanes*, in his Chronicle cited by *Meursius*, tells us, that *Muhammed* being about to die, design'd four Admirals, who were to subdue those who being of *Arabick* extraction, did yet assert the Christian Religion. And a nameless Author, quoted by *Bedwell*, seconds this Relation, by informing us, that a certain *Caliph* constituted four Tribunes of his Souldiery, vulgarly call'd Admirals, (*Admirantes* they are call'd in his stile, though in the phrase of *Theophanes* above cited, they are stil'd *Amirai*) to every one of which, he gave the Command of many subordinate Officers and Captains, and which Commanders he call'd the sharp Swords of God. And *Junius* out of the Notes of *Cedrenus* upon *Curopalates*, discovers to us, that *Mahomet* upon his Decease, appointed four Admirals, whom he enjoyn'd to crush and extirpate, all those *Arabians* who had embrac'd the Christian Religion. And farther relates, that they to perfect his Commands, advanced against *Theodorus*, Chamberlain and General to the *Greek* Emperour, between whom and themselves, a fatal Field was commenc'd; in which, three of these Admirals, and a numerous heap of other Souldiers perish'd.

The Tirant of *Babylon*, in the stile of *Henry* of *Huntington*, is nam'd the Admiral of *Babylon*; and the same  
 Author

Author in his Chronicle, asserts twelve Admirals of the *Pagans*, to have been slain at the Siege of *Antioch*. And *Rupert* the Monck, in the fourth Book of his *Saracemical* History, affirms, that the Son of *Cassian*, the Great King of *Antioch*, and twelve Admirals, which the *Caliph* of *Babylon* (King he calls him) had employ'd with succours to the King above mention'd, all perish'd at the Siege of *Antioch*; and these twelve which had the Appellation of Admirals annex'd to them, he makes to be Rulers of twelve distinct Territories or Provinces: And the same Author, in the beginning of his fifth Book, relates, that the Embassadors of the *Caliph* of *Babylon*, in their Addresses to the *French* Chieftains, stile that Monarch, the Admiral of *Babylon*. *Dominus noster Admiralus Babylonie, mandat vobis Francorum Principibus salutem*; so in his phrase runs their Application. *Monstrelet*, an Anthour of good estimate, mentions *Arcubalistarum Admirallum*, an Admiral of the *Arcubalists*, or of those perions who were arm'd with Crosse-bows; and lastly, *Matthew Paris*, in his life of *William Rufus*, tell us, of one *Corbaran*, who after he had Marshall'd his Army, and brought his squadrons into Form and Order, put those Troops under the Command of 29. Kings and Admirals.

But as this eminent Maritime Officer in these latter Times, hath by prescription constantly assum'd the Name of Admiral; so in the Times of an elder Inscription, he was not always stil'd *Admirallus*, but very frequently *Magnus Drungarius Classis*, or the great *Drungar* of the Navy, an Office of eminency and high estimate under the *Greek* Emperours; yet this Title was not so confin'd to the Sea, but that it was attributed likewise to those noble persons, who manag'd the Command of the Land Militia; and therefore the learned *Meursius* notes, that there was *Magnus Drungarius Bigla*, that is, *Vigilia seu Excubiarum Præfectus*, the chief Commander or Præfect, to whose inspection, the care of the Watch was solely entrusted; the Ensign or Monument

of whose Authority, as the same *Maurus* intimates, was a Scepter, or Truncheon of a Purple Colour, richly gilded and adorn'd at the bottome. Now the Etymology of this word *Drungarius*, as *Leunclavius* asserts, is deriv'd from the Modern Greek *Δρυγός*, and signifies the same with them, as *Agla* does with the *Turks*, and may be interpreted to be that Scepter or Truncheon, which is the symbol of their Office and Authority; hence the *Drungarii* amongst the *Greeks*, & the *Agarii* amongst the *Turks*, are equivalent to our Colonels in *Christendoms*. But the more proper and genuine Etymology of the word, as it is us'd by *Vopiscus* and *Vegetius*, is extracted from *Drungus* or *Druncus*, which in their sense imports as much as *Globus Militum*, and may without distorting the Phrase, be interpreted a Squadron of Soldiers. *Vegetius* in his discourse *de Re Militari*, Lib. 3. Cap. 16. observes, that *scire Dux debet contra quos Drungos, hoc est Globos Hostium quos equites oporteat poni*; and *Vopiscus*, in the year 280. relating the Victories of *Probus* the Emperour, over the *Blemis* and the *Germani*, tells us, that he to enhance the Pompe and Magnificence of his Conquests, *Omnium Gentium Drungos duxit*, he carried Squadrons or Heaps, of all those Nations he had subdued before his triumphant Chariot.

I should now wind up this Discourse, but finding so many eminent persons of the English Nation, to have been invested and dignified with the Title of Admiral, I thought it a labour not unworthy consideration, to represent to the publique view a just Scale or Series of those worthy Heroes, who have been in their several Generations, by the Favour of the Prince advanc'd to this Office, whose Catalogue is exactly Register'd in the learned and elaborate Pages of Sir *Henry Spelman's* Glossary.

*Marthufius* the Arch-pirate in old Latine Records, call'd *Archi-Pirata*, and *Nautarum Princeps*, was Admiral under King *Edgar*, and had several subordinate Commanders under his jurisdiction, (*Præfetti* they are call'd in

in the Record) who had the Command under this *May-  
thufum* of almost a Thousand Ships; a Report, if we consi-  
der the Bulk and Dimension of those Maritime Vessels  
which were employ'd in those Times not altogether  
improbable, where Note, that although in these Moderne  
Ages, the Name of Pirate is still applied to one who  
supports himself by Pillage and Depredation at Sea, yet  
in Times of an elder inscription, the word *Pirata* or  
Pirate, was sometimes attributed to those persons to  
whose care the Mole or Peer of any Haven (call'd in  
Latine *Pyra*) was entrusted, and by whose Inspection it  
was provided, that those places should receive no pre-  
judice, which were the occasion of so much advantage  
to the publique interest.

After the mention of *Mathufum*, there is a Gap or  
Interval in the Register of the Admirals, and none re-  
corded until the 8th. year of *Henry* the 3d. and then  
*Richard de Lucy* of *Newington Lucies* in *Kent* begins  
the Catalogue, from whom *Ric. Lucy* of *Charlecot* in  
*Warwickshire*, Esq. is in a Collateral or younger Line  
originally descended. After whom, the ensuing Roll of  
Admirals is without any intermission or interruption, in  
an even clew or series conducted down to our Times.

*Tho. de Moleton* had the custody of the narrow Seas  
(*Custos Maris* the Record styles him) in the 48th. year  
of *Henry* the 3d.

*Will. de Leybourne* of *Leybourne Castle*, was in a con-  
vention held at *Bruges*, in the 15th. year of *Edward* the  
first still'd Admiral. After his *Exit*, the Office of Ad-  
miral being held of too vast concernment to be managed  
and weilded by one person, there were three Admirals  
created, in the 22th. of *Edw.* the 2d. One had the care  
of the parts towards the North, which was committed  
to *John de Botetort*; A second, had the charge of the Sea-  
coast South-ward, which was entrusted to *William de Ley-  
bourne*; And a third, had the custody of the Western  
shore, which was delegated to the inspection of an *Irish*  
Knight. Afterwards this Office was invested in two;

*The first Invention, and*

The first whereof, had the custody of the *English* shore, from the *Thames* Mouth Northwards: The second of whom, had the charge of the *Western* shore, from the Mouth of the *Thames* South-west; a Register of which here follows.

**Admirals of the  
North.**

34 Edw. 1.	<i>Edward Charles</i>
3 Edw. 2.	<i>Joseph Botetort</i>
10 Edw. 2.	<i>Joseph Perbrun</i> aliàs <i>Perburne</i>
15 Edw. 2.	<i>John Perbrun</i>
16 Edw. 2.	<i>John Perbrun</i>
18 Edw. 2.	<i>John Sturmie</i>

**Admirals of the  
West.**

<i>Gervase Allard</i>	
<i>Nicholas Crioll</i>	10 Edw. 2.
<i>Sir Rob. Leybourne</i>	
<i>John Athey</i>	12 Edw. 2.
<i>Sir Rob. Leybourne</i>	
<i>Robert Battaille</i>	
aliàs <i>Battell</i>	
<i>Robert Bendon</i>	

But I know not upon what exigency, or emergent occasion, this Office in the year 1325. that is in the 19<sup>th</sup>. year of *Edward* the second, was again entrusted to the custody of three, which were, *John Otervin*, *Nicholas Crioll*, and *John de Felton*, which are stil'd in the Record Admirals of *Tarmouth*, *Portsmouth*, and of the *West*. But about the latter part of this very year, this Office was again reduc'd to the Care and Charge of, a Catalogue of whom, offers it self up to our present consideration.

**Admirals of the North.**      **Admirals of the West.**

	<i>John Sturmy</i>	<i>Nicholas Crioll</i>
19 Edw. 2.	<i>John Sturmy</i>	<i>Nicholas Crioll</i>
20 Edw. 2.	<i>Joseph de Leybourne</i>	



**Admirals of the North and West, in the Time of  
Edward the third.**

<i>John Perbrun</i>	<i>Waretius de Valoigns</i>	1 Edw. 3.
<i>John de Norwich</i>	<i>William de Clinton</i>	8 Edw. 3.
<i>Thomas Oughired</i>	<i>Robert de Hegham, aliàs</i>	10 Edw. 3.
	<i>Higham</i>	
<i>Jo. de Norwich</i>	<i>Geffrey de Say</i>	10 Edw. 3.
<i>Robert de Ufford, &amp;</i>	<i>William de Manston, aliàs</i>	10 Edw. 3.
<i>Jo. de Roos</i>	<i>Manton</i>	
<i>Sir Walter Manney</i>	<i>Bartholomew Burgherft</i>	11 Edw. 3.
<i>Thom. de Drayton</i>	<i>Peter Dard, alias Bard</i>	12 Edw. 3.
<i>Robert de Morley, Baron</i>	<i>Robert Trussell</i>	13 Edw. 3.
<i>of Hengham</i>		
<i>Robert Morley</i>	<i>Rich. Fitz-Allan, Earl of</i>	14 Edw. 3.
	<i>Arundell</i>	
<i>William Trussell</i>	<i>William Clinton, Earl of</i>	16 Edw. 3.
	<i>Huntington</i>	
<i>William Trussell</i>	<i>Robert Beaupell</i>	17 Edw. 3.
<i>Robert Ufford</i>	<i>John de Montgomery</i>	18 Edw. 3.
<i>Robert Ufford</i>	<i>Reginald de Cobham</i>	20 Edw. 3.
<i>Sir John Howard</i>	<i>Rich. Fitz-Allan, Earl of</i>	21 Edw. 3.
	<i>Arundell</i>	
<i>Walter Lord Manney</i>	<i>Rich. Fitz-Allan</i>	22 Edw. 3.
<i>Sir Robert de Morley</i>	<i>Sir John de Montgomery</i>	22 Edw. 3.
<i>Robert de Causton</i>	<i>Sir Reginald de Cobham</i>	24 Edw. 3.
<i>Robert de Morley</i>	<i>John de Beauchampe, Earl</i>	25 Edw. 3.
	<i>of Warwick</i>	
<i>William de Bohun, Earl</i>	<i>Henry Duke of Lancaster</i>	25 Edw. 3.
<i>Northampton</i>		
<i>William de Bohun</i>	<i>Tho. de Beauchampe, Earl</i>	26 Edw. 3.
	<i>of Warwick</i>	
<i>Robert de Morley, Baron</i>	<i>Jo. de Beauchampe</i>	29 Edw. 3.
<i>of Hengham</i>		
<i>Robert de Morley</i>	<i>Guy de Brian</i>	30 Edw. 3.
<i>Robert de Morley</i>	<i>Guy de Brian</i>	33 & 34
	<i>Guy de Brian</i>	Edw. 3.

— *The first Invention, and*

4 *Edw. 3.*  
35 *Edw. 3.*  
38 *Edw. 3.*

*John de Beauchampe*  
*Robert Herle*  
*Ralph Spigurnell*

These three manag'd the Office of Admiral alone. But in the 43d. year of *Edw.* the 3d. the Custody of the Narrow Seas, extending North and West, was again entrusted to two, whose Names are thus Register'd.

**Admirals of the North. Admirals of the West.**

43 *Edw. 3.*  
44 *Edw. 3.*  
45 *Edw. 3.*  
46, 47, 48. *Ed. 3.*  
50 *Edw. 3.*

50. & 51.  
*Edw. 3.*

*Nicholas Tamworth*  
*John Nevill*  
*Ralph de Ferrars*  
*William Nevill*  
*William de Ufford, Earl*  
*of Suffolk*  
*Sir Michael De la Pole,*  
*Lord of Wingfield*

*Robert Aston*  
*Guy de Brian*  
*Robert Aston*  
*Sir Philip Courtney*  
*William de Montacute*  
  
*Rich. Fitz-Allan, Earl of*  
*Arundell*

**Admirals under Richard the second.**

**Admirals of the North. Admirals of the West.**

1 *Rich. 2.*

2 *Rich. 2.*

3, 4, & 5.  
*Rich. 2.*

6 *Rich. 2.*

7 *Rich. 2.*

8 *Rich. 2.*

9 *Rich. 2.*

10 *Rich. 2.*

*Thomas de Beauchampe,*  
*Earl of Warwick*  
*Sir Thomas Percy*  
*Will. de Elmham*  
  
*Walter Fitz-Walter, Baron*  
*of Woodham*  
*Henry Percy, Earl of*  
*Northumberland*  
*Thomas Percy his Brother*  
  
*Philip Lord Darcy*  
*Richard Fitz-Allan, Earl of*

*Rich. Fitz-Allan, Earl*  
*of Arundell*  
*Sir Hugh Calveley*  
*Sir Philip Courtney*  
*Walter de Hauley*  
*John de Roches*  
  
*Edward Courtney, Earl of*  
*Devon*  
*Edw. Radington, Prior of*  
*St. Johns of Hierusalem*  
*Sir Thomas Trivet*  
*Arundel and Surrey, was*  
*sole Admiral of England, after whom the Office re-*  
*turn'd to be manag'd by two.*  
  
*Admi-*



**Admirals of the North. Admirals of the West.**

<i>John de Beaumont, Baron de Folkingham</i>	<i>John Holland, Earl of Huntington</i>	12 Rich. 2.
<i>Sir John Roches</i>	<i>Jo. Holland</i>	12 Rich. 2.
<i>Edward Earl of Rutland</i>	<i>John Holland</i> abovesaid again.	14 Rich. 2.
<i>Edw. Earl of Rutland and Cork</i> , was sole Admiral both of the Eastern and Western shore.		15 Rich. 2.
<i>Jo. Beauford, Son of John of Gaunt, Marquis Dorsett,</i> and Earl of <i>Somerset</i> , was sole Admiral of <i>England</i> .		21 Rich. 2.
<i>Thomas Percy Earl of Worcester</i> , was sole Admiral of <i>England</i> .		22 Rich. 2.

**Admirals under Henry the fourth.**

**Admirals of the North. Admirals of the West.**

<i>Richard Grey Baron of Codnor</i>		2 Henry 4.
<i>Thomas Beaufort Brother to the Marquis.</i>	<i>Sir Thomas Reniston</i> <i>Thomas Lord Barkley</i>	5 Henry 4.
<i>Thomas of Lancaster, Vice-Roy of Ireland,</i> Lord High-Steward of <i>England</i> , Duke of <i>Clarence</i> , manag'd the Office of Admiral alone.		6 Henry 4.

**Admirals of the North. Admirals of the West.**

*Nicholas Blackbourn, Esq.* *Richard Cliderow, Esq.* 7 Henry 4.  
After these two were dislodg'd, I find the Office of  
Admiral no more assign'd to two, but for the future cir-  
cumscrib'd and concenter'd in one; a Roll of whom  
ensues.

**Admirals of England.**

*John Beaufort, Marquis Dorsett* abovesaid, Brother to  
*Henry the fourth*, was sole Admiral of *England*.

*The first Invention, and*

8 Henry 4.

*Edmond Holland, Earl of Kent, was sole Admiral.*

9 Henry 4.

*Tho. Beaufort, Brother to the Marquis aforesaid, was sole Admiral of England.**Admirals of England under Henry the first.*

4 Henry 6.

*John of Lancaster, Duke of Bedford, and Earl of Richmond, was Lord High Admiral of England.*

14 Henry 6.

*John Holland, Duke of Exeter, and Earl of Huntingdon, was constituted Admiral of England, Ireland, and Aquitaine, and his Son Henry had the Grant of this Office in Reversion.*

25 Henry 6.

*William de la Pole, Marquis and Earl of Suffolk, was constituted Admiral of England, Ireland, and Aquitaine, during the Nonage of Henry Duke of Exeter.*

28 Henry 6.

*Henry Holland, above said Duke of Exeter, was Admiral of England, Ireland, and Aquitaine.**Admirals under Edward the fourth.*

1 Edward 4.

*Richard Nevill, Earl of Warwick and Salisbury, was Admiral of England.*

2 Edward 4.

*William Nevill, Earl of Kent, and Baron Falconbridge.*

3 Edward 4.

*Richard Duke of Gloucester.*

49 Henry 6.

*Richard Nevill, Earl of Warwick.*

11 Edward 4.

*Richard Duke of Gloucester Admiral again.**Admirals under Richard the third.*

1 Richard 3.

*John Howard Duke of Norfolk.**Admirals of England under Henry the seventh.*

1 Henry 7.

*John Vere, Earl of Oxford, Lord high Chamberlain of England.*

**Admirals under Henry the eighth.**

Sir Edward Howard Knight.	4 Henry 8.
Thomas Howard, Lord High Admiral of England, Ireland, Aquitain.	5 Henry 8.
Henry Fitz-Roy, Duke of Richmond and Somerset.	17 Henry 8.
William Fitz-William, Earl of South Hampton.	28 Henry 8.
John Lord Russell Knight.	32 Henry 8.
John Dudley Knight, Viscount Lisle, and Baron Malpas.	34 Henry 8.

**Admirals under Edward the sixth.**

Thomas Seymour Knight, Baron Sudeley, Lord High Admiral of England, Ireland, Wales, Calais, and Boloigne.	1 Edward 6.
John Dudley, Knight of the Garter, Earl of Warwick, Viscount Lisle, Master of the Kings Houshold, Admiral of England, Ireland, Wales, Calais, Boloigne, and their Marches, as also of Normandy, Gascoign, and Aquitain.	3 Edward 6.
Edward Clinton Knight, Baron Say and Seal.	4 Edward 6.

**Admirals created under Queen Mary.**

William Howard Knight, Baron of Effingham.	1 Marie
Edward Clinton Knight, Baron Say and Seal.	3 Marie

**Admirals created under Queen Elizabeth.**

Charles Howard, Baron of Effingham, after created Earl of Nottingham, and Knight of the Garter, Lord High Admiral of England, Ireland, Wales, Calais, and the adjacent Marches, as likewise of Normandy, Gascoign, and Aquitain.	27 Elizabeth.
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**Admirals created under King James.**

George Villiers, then onely Marquis of Buckingham, Viscount	16 Jacob.
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*The first Invention, and*

Viscount *Villers*, and Baron of *Whaddon*, was constituted Lord High Admiral of *England*.

**Admirals created under King *Charles* the first.**

4 Carol. 1.

*Robert Bartine*, Earl of *Lindsey*, Lord High Chamberlain of *England*.

*Algernon Percy*, Earl of *Northumberland*, Knight of the Garter.

**Admirals under King *Charles* the second.**

*James* Duke of *York*, and *Albany*, at this instant, Lord High Admiral of *England*.

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**F I N I S.**

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